



## November 2019

Renew your membership to our local chapter for only \$15 a year! 3 ways to renew: pay at the Reception Desk, see Len Bridges, our Treasurer, at a meeting, or send your renewal with your name, address, phone number, and e-mail to: East Bay Chapter, HLAA, P.O. Box 12484, Oakland, CA

94604-12484. See back page to sign up and support National HLAA.

### MEETING INFORMATION FOR SATURDAY, November 9, 2019

**Topic and Speaker:** Our speaker, Dr. Shariq Mobin, a Ph.D. graduate of University of California, Berkeley, in auditory neuroscience and machine learning. Over the last five years he's been working on algorithms that specifically solve problems of hearing in noisy restaurants. His new company, AudioFocus, which is working with state of the art machine learning techniques that allow each user to have a custom model designed specifically for their loved ones.

#### Schedule:

**9:00 a.m. - Set up:** We always love to have you come early to help!

**9:30 a.m. – Refreshments,** coffee and tea will be served.

**10:00 a.m. - Meeting starts:** Introductions, Announcements, speaker.

**NOTE:** Meeting is captioned, and the room is looped. You won't miss a word! Use the hearingloop system by turning your hearing aid(s) to the Telecoil (T-coil) setting. Thanks to Peter Townsend, Steve Ulrich and the team for setting up our room, the audiovisual, and the captioning.

**11:30 a.m. - Meeting adjourns.**

**How to find us:** Come to the Fabiola building, 3801 Howe Street, Oakland. Free parking is available across the street, in the Kaiser parking structure. From the garage, walk across Howe Street and go into the Fabiola building. Take the elevator down to the ground floor and go to Room G26. For directions to Kaiser, call 510-752-1000.

**HLAA-EB will post to the California State Association webpage and our website.**

**Check out our website:** <http://www.hearinglosseb.org/> **Contact us:** [info@hearinglosseb.org](mailto:info@hearinglosseb.org)

### MEETING NOTES: *The Latest Advances in Correcting Hearing Loss*

At our Oct. 12, 2019 meeting, our guest speaker was Dr. Pragati Mandikal Vasuki, Ph.D., a research audiologist and hearing scientist at EarLens, a hearing device company headquartered in Menlo Park, California. Initially, Dr. Vasuki provided some statistics on hearing loss, followed by an overview of how hearing works and common causes of hearing loss. After reminding us of some of the limitations of current conventional hearing aids, she then introduced us to the EarLens Contact Hearing Aid, an innovative device that incorporates the latest advances in correcting hearing loss.



## **Statistics on the Prevalence of Hearing Loss:**

Dr. Vasuki offered some surprising statistics on the increasing number of persons with hearing loss. For example:

- 23% of persons over age 12 have hearing loss.
- 44% of persons by age 60 have hearing loss.
- 89% of persons by age 80 have hearing loss.
- The most common health problem in the world is not diabetes, high blood pressure or obesity but hearing loss.

## **How Hearing Works and Common Causes of Hearing Loss:**

Referring to a video that was concurrently showing, Dr. Vasuki explained that a normal hearing ear has three parts: 1) The external ear that you see outside; 2) The middle ear which has three tiny bones; and 3) The inner ear which actually houses the organ of hearing. The sound waves come in through the outer ear, go to the three tiny bones, and finally, go into the snail-shaped structure called the cochlea, which has tiny hair cells. It is these hair cells that generate nerve impulses that move the sound to your brain, which then interprets the sound signals and helps you understand the sound. Individuals with normal hearing have a bandwidth of sound ranging from 20 Hz to 20,000 Hz. However, as the tiny hair cells are damaged or destroyed, hearing problems may develop, reducing sound quality while limiting the spectrum of sound and the ability to understand speech in noise. Common causes of hearing loss include: Age, heredity, injury, noise, low sounds, hypertension, diabetes, and medications.

When a person has a hearing test, an audiogram is used to measure and demonstrate one's current level of hearing or loss in each ear. Typically, hearing of high pitches goes sooner than hearing of low pitches, as frequency words and misunderstanding what is being said. Constantly trying to tune in on "What is he/she saying?" can be frustrating and stressful, as well as lead to fatigue, anxiety, irritability, isolation, depression and even cognitive decline. In sum, these associated factors of hearing loss often manifest as a reduced quality of life.

## **Conventional Hearing Aids (H/A's) & Their Limitations:**

Despite the growing prevalence of hearing loss, only 20% of individuals who could benefit from hearing aids actually end up regularly using them, due to the limitations of some conventional acoustic hearing aids noted by users:

- The tinny/unnatural sound quality bearing little resemblance to the rich, vibrant sound before hearing loss.
- The limited range of high and low sound frequencies (500 Hz to 5,000 Hz) of conventional H/A's.
- The annoying whistling or feedback sound emanating from some conventional H/A's.

## **The Earlens Contact Hearing Aid & Its Advantages:**

Dr. Vasuki proceeded in describing the Earlens Contact Hearing Aid and the benefits of its innovative technology. The Earlens Contact Hearing Aid consists of three parts: 1) A behind-the-ear processor, 2) An ear tip that is similar to an ear mold, and 3) The tympanic lens, which sits directly on the eardrum. As the tympanic lens is in contact with the eardrum, it directly drives/vibrates the eardrum, allowing a broad range of sound frequencies which is transformed to mechanical energy that generates the direct vibrations of the individual's eardrum. Thereby, the Earlens Hearing Aid overcomes many of the limitations of conventional hearing aids. For example:

- Crisp/natural sound quality over an extended range of high and low frequencies (100 Hz to 10,000 Hz).
- Sound localization improves with the wider frequency of energy being delivered to the ear.

- Elimination of whistling or feedback, resulting in better understanding of speech in noisy environments.

### The Earlens Research Program, Studies and Publications:

Earlens has an on-going research program that allows hearing-impaired listeners to experience the Earlens Contact Hearing Aid and give feedback on the device. Their research studies are summarized in several publications. For further information and questions, or to join the Earlens research program, contact Dr. Vasuki at [pragati.mandikal@earlens.com](mailto:pragati.mandikal@earlens.com). To learn more about the Earlens device, you can attend their monthly seminar on Thursday, Nov. 7 at 11 a.m. or Wednesday, Nov. 20 at 11 a.m. RSVP to [CherylMedina@Earlens.com](mailto:CherylMedina@Earlens.com) or call (650) 739-4564.

~ Kathy Fairbanks

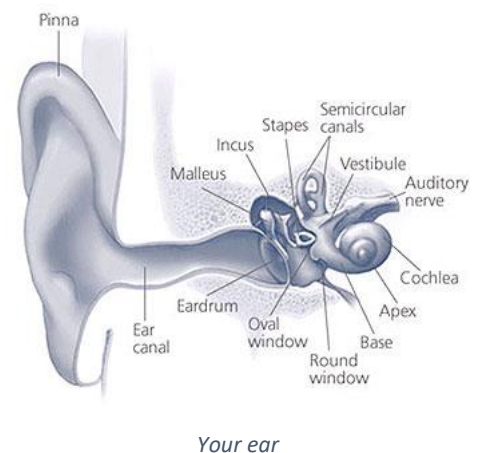
**ACT Theaters, The Geary and The Strand, in SF are now looped!** The ACT received a grant from TDF providing Open Captioning for the 2019-20 season. For this season, ACT is extending a discount code for **\$25 tickets** for each Open Captioned dates for the members of HLAA-EB chapter! To purchase tickets, visit <https://secure.act-sf.org/events?promoApplied=true> and put in the code **OPENCAPTION**. More information about the productions can be found online at this URL: [https://www.act-sf.org/home/box\\_office/1920\\_season.html](https://www.act-sf.org/home/box_office/1920_season.html). The \$25 price is active through November 30<sup>th</sup>, 2019, so order early. **OPEN CAPTION DATES:** *Top Girls*: Sat., October 5, 2 p.m.; *Testmatch*: Sat., Nov. 23, 2 p.m.; *Wakey, Wakey*: Sat., Feb. 8, 2 p.m.; *Gloria*: Sat., March 14, 2 p.m.; *Toni Stone*: Sat., March 21, 2 p.m.; *Rocky Horror Show*: Sat., May 9, 2 p.m.; and *Poor Yella Rednecks: Vietgone 2*: Sat., June 20, 2 p.m.

### Did you know?

There are 3 types of hearing loss:

1. Conductive Hearing Loss is due to problems with the ear canal, ear drum, or middle ear and its little bones (the malleus, incus, and stapes). Some causes of conductive hearing loss are malformation of outer ear, ear canal, or middle ear structure, fluid in the middle ear from colds, ear infection, allergies, poor Eustachian tube function, perforated eardrum, benign tumors, impacted earwax, infection in the ear canal, a foreign object in the ear and otosclerosis or a hereditary disorder in which a bony growth forms around a small bone in the middle ear, preventing it from vibrating when stimulated by sound.
2. Sensorineural Hearing Loss is due to problems of the inner ear, also known as nerve-related hearing loss. Causes include exposure to loud noise, aging, head trauma, virus or disease, autoimmune inner ear disease, heredity, malformation of the inner ear, Meniere's disease, otosclerosis, and tumors. Treatments include immediate corticosteroids, possible surgery, possible long-term corticosteroids and sometimes drug therapy, possible low-sodium diet and diuretics,
3. Mixed Hearing Loss is caused by a combination of conductive damage in the outer or middle ear and sensorineural damage in the inner ear (cochlea) or auditory nerve.

No matter which type of hearing loss you have, the Hearing Health Foundation (HHF), emphasizes the importance of treating your hearing loss because untreated hearing loss can have a negative impact on your health. The HHF can be found at [HearingHealthFoundation.org](http://HearingHealthFoundation.org).



Your ear

## HEARING AID BATTERIES!

Gerry Niesar or another Costco member can get them at 17 cents apiece! Your old batteries can be recycled by putting them in a plastic ziplock bag and placing on top of your recycling waste container on your trash pick-up day. Batteries are considered hazardous waste and may not be thrown in the regular trash.

Alternatively, **hearOclub** is a hearing aid and cochlear implant battery subscription service which delivers DieHard brand batteries on a set schedule (with free shipping!). Sign up for a hearOclub subscription and receive **\$30 worth of free batteries plus a battery tester keychain - a \$40 value**, exclusive to HLAA members! Use the coupon code **HLAAMember** online at [hearoclub.com](http://hearoclub.com) or by calling 833.LISTEN-2 (833.547.8362). If you cannot get out easily, batteries are delivered to your address.

**DONATE USED HEARING AIDS and/or HEARING EQUIPMENT!** To donate, place them in a ziplock baggie and give to the person at the reception desk at the next meeting. These items may benefit low income persons through the Lions Club "Ear of the Lion" program which refurbishes them. For more information, talk to Dale Davis at a meeting or [ddavis94605@gmail.com](mailto:ddavis94605@gmail.com). Applications for hearing aids from Ear of the Lion available at the information table.

### East Bay Leadership Team

The chapter is run by a Steering Committee, Leader Dale Davis, [ddavis94605@gmail.com](mailto:ddavis94605@gmail.com)

Advocacy: Gerald Niesar, [gniesar@nvlawllp.com](mailto:gniesar@nvlawllp.com)

Outreach: Susan Jeffries Fitzgerald, [susanlj29@gmail.com](mailto:susanlj29@gmail.com)

Recording Secretary: Rotation (Volunteers)

National Chapter Coordinator/Liaison: Susan Jeffries Fitzgerald, [susanlj29@gmail.com](mailto:susanlj29@gmail.com)

Treasurer: Len Bridges, [lenbridges3993-hlaa@outlook.com](mailto:lenbridges3993-hlaa@outlook.com)

### Committees

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## JOIN THE NATIONAL HEARING LOSS ASSOCIATION!

Only \$45 for an individual or \$55 for a couple. This includes the Hearing Loss magazine in print and digital for one year.

For digital magazine copy only, an individual membership costs only \$35/year. Students are \$25/year.

Go to this URL to join today:

<https://www.hearingloss.org/make-an-impact/become-a-memberrenew/>

**WALK FOR HEARING IS COMING TO THE BAY AREA NEXT SPRING! DATES, TIMES AND PLACE TO BE DETERMINED BUT SOMETHING TO LOOK FORWARD TO!**